Docket No.: 106145-00064

IN THE CLAIMS:

Please amend the claims as follows:

1. (Currently Amended) An apparatus for controlling the rigidity of a

vehicle, the apparatus comprising:

a controller for controlling a buckling form, which controls the buckling form by

adding applying a lateral force to a member to be inputted subjected to a collision load,

wherein the lateral force is applied to the member in a direction substantially

perpendicular to a direction of the collision load, and

wherein the collision load is applied to the vehicle in a direction extending from a

first longitudinal end of the vehicle to a second longitudinal end of the vehicle a lateral

force in a direction substantially perpendicular to the collision load,

said controller comprising:

frame restrictors which are provided on at least one portion of said hollow

member in the direction substantially perpendicular to the collision load, and which

restrict deformation of said frame member in the direction substantially perpendicular to

the collision load through the lateral force, and

a restriction regulator which regulates a restriction state of said frame

restrictors.

Claims 2-3. (Canceled)

4. (Previously Presented) The apparatus as claimed in Claim 1, further

comprising at least one collision detector, wherein the lateral force is controlled based

on an evaluation output from the at least one collision detector.

2

Docket No.: 106145-00064

5. (**Currently Amended**) The apparatus as claimed in Claim 4, wherein the lateral force generator the controller is provided between an upper wall of the member and a lower wall of the member, and wherein the member is disposed within a bumper.

- 6. (Currently Amended) The apparatus as claimed in Claim 4, wherein that the at least one collision detector comprises a distance sensor that is usable with at least one member selected from of a speed sensor and a CCD camera.
- 7. (**Previously Presented**) The apparatus as claimed in Claim 4, wherein the at least one collision detector comprises a plurality of distance sensors provided on the bumper.
- 8. (Currently Amended) The apparatus as claimed in Claim 1, wherein the buckling of the side frame the member occurs in a primary deformation mode and a secondary deformation mode, and wherein a ratio of a length L of the side frame member to a thickness t of the side frame member L/t is set wherein so that a difference between a buckling load during the primary deformation mode and a buckling load during the secondary deformation mode is substantially equal to a predetermined value.
- 9. (**Currently Amended**) An apparatus for controlling the rigidity of a vehicle body, the apparatus comprising:

a side frame member of the vehicle body;

a lateral force generator which controls buckling of <u>an intermediate member</u> disposed on the side frame member and which applies the side frame member by adding a lateral force to a collision load to be applied to <u>an said</u> intermediate member disposed in <u>on</u> the side frame member,

wherein the collision load is applied in a direction coinciding with <u>of</u> a longitudinal axis of the side frame member, which is parallel to a longitudinal axis of the vehicle body, and

wherein the lateral force is added applied in a direction substantially perpendicular to the longitudinal axis of the side frame member; and

at least one collision detector,

wherein the lateral force is controlled based on an evaluation output from the at least one collision detector, and

wherein the at least one collision detector comprises a plurality of distance sensors provided on the bumper.

- 10. (Currently Amended) The apparatus as claimed in Claim 9, wherein the intermediate member comprises a hollow frame member, and the lateral force generator comprises a frame restrictor provided on at least one end portion of the hollow frame member and which restricts deformation of the intermediate hollow frame member through the lateral force, and a restriction regulator which regulates the restriction state of the frame restrictor.
- 11. (**Currently Amended**) The apparatus as claimed in Claim 9, wherein the lateral force generator is disposed within the side frame member a bumper.
- 12. (**Currently Amended**) The apparatus as claimed in Claim 9, wherein the at least one collision detector comprises a distance sensor that is usable with at least one member selected from of a speed sensor and a CCD camera.
- 13. (**Currently Amended**) The apparatus as claimed in Claim 9, wherein the buckling of the side frame intermediate member occurs in a primary deformation

Docket No.: 106145-00064

mode and a secondary deformation mode, and wherein a ratio of a length L of the side

frame intermediate member to a thickness t of the side frame intermediate member L/t

is set wherein so that a difference between a buckling load during the primary

deformation mode and a buckling load during the secondary deformation mode is

substantially equal to a predetermined value.

14 (Currently Amended) An apparatus for controlling the rigidity of a

vehicle body, the apparatus comprising:

a side frame member of the vehicle body, the side frame member having a first

side frame member portion and a second side frame member portion,

a lateral force generator which controls buckling of the side frame member by

adding applying a lateral force to a collision load to be applied to an intermediate

member disposed directly between opposing end faces of the first and second side

frame member portions members,

wherein the collision load is applied in a direction coinciding with of a longitudinal

axis of the side frame member, which is parallel to a longitudinal axis of the vehicle

body, and

wherein the lateral force is added in a direction substantially perpendicular to the

longitudinal axis of the side frame member.

15. (Currently Amended) The apparatus as claimed in Claim 14, wherein

the intermediate member comprises a hollow frame member, and the lateral force

generator comprises a frame restrictor provided on at least one end portion of the

hollow frame member and which restricts deformation of the intermediate hollow frame

5

Docket No.: 106145-00064

member through the lateral force, and a restriction regulator which regulates the restriction state of the frame restrictor.